

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated January 19, 2010 has been received and its contents carefully reviewed.

Claims 1 and 5 are hereby amended. Claims 2 and 3 are canceled without prejudice or disclaimer. Accordingly, claims 1, 4-13 are currently pending, of which claim 4 is withdrawn from consideration. Reexamination and reconsideration of the pending claims are respectfully requested.

The Office Action rejects claims 2, 3, and 5-13 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Claims 2 and 3 are canceled, so the rejection of these claims is moot.

To advance prosecution, Applicants have amended claim 5 to remove the limitation “intercalation compounds of the layered silicate minerals.” As such, the rejection of claims 5-13 is moot. Applicants therefore respectfully request withdrawal of the 35 U.S.C. §112, first paragraph, rejection of claims 2, 3, and 5-13.

The Office Action rejects claims 2 and 3 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 2 and 3 are canceled, so the rejection of these claims is moot. Applicants respectfully request withdrawal of the 35 U.S.C. §112, second paragraph, rejection of claims 2 and 3.

The Office Action rejects claims 1-3 and 5 under 35 U.S.C. §102(b) as being anticipated by WO 02/015313 to Fukuda et al. (using U.S. Patent No. 6,844,097 as English translation and citations) (*Fukada*). Claims 2 and 3 are canceled, so the rejection of these claims is moot. Applicants respectfully traverse the rejection of claims 1 and 5.

As required in M.P.E.P. § 2131, in order to anticipate a claim under 35 U.S.C. § 102, “the reference must teach every element of the claim.” *Fukada* fails to teach all the elements of claims 1 and 5, and thus cannot anticipate these claims.

Claim 1 recites, “the solid electrolyte membrane consists of one or plural kinds of layered silicate minerals.” *Fukada* fails to teach at least this element of claim 1. In fact, *Fukada* discloses “a membrane core 9 comprising a polymer ion exchange component, for example, an aromatic hydrocarbons polymer ion-exchange component, and a plurality of phyllosilicate particles 10 that disperses in the membrane core 9.” *Fukada*, column 3, lines 2-6, emphasis added. Accordingly, claim 1 is allowable over *Fukada*.

Claim 5 recites, “a solid electrolyte membrane consisting of one or plural kinds of layered silicate minerals.” *Fukada* fails to teach at least this element of claim 5. Accordingly, claim 5 is allowable over *Fukada*.

Applicants therefore respectfully request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1-3 and 5.

The Office Action rejects claims 1-3 and 5 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0054219 to Won (*Won*). Claims 2 and 3 are canceled, so the rejection of these claims is moot. Applicants respectfully traverse the rejection of claims 1 and 5.

Claim 1 recites, “the solid electrolyte membrane consists of one or plural kinds of layered silicate minerals.” *Won* fails to teach at least this element of claim 1. In fact, *Won* discloses “[t]he ion exchange composite membrane according to the present invention forms a connected network, wherein natural clay or modified organic clay is dispersed in an ion-conducting polymeric film as a barrier material” and “‘natural clay or organic clay is dispersed in polymeric membrane’, means that the natural clay or the modified organic clay is dispersed on the surface of the polymeric film as well as inside the polymeric matrix as one compartment.” *Won*, ¶¶0025, 0026, emphasis added. Accordingly, claim 1 is allowable over *Won*.

Claim 5 recites, “a solid electrolyte membrane consisting of one or plural kinds of layered silicate minerals.” *Won* fails to teach at least this element of claim 5. Accordingly, claim 5 is allowable over *Won*.

Applicants therefore respectfully request withdrawal of the 35 U.S.C. §102(e) rejection of claims 1-3 and 5.

The Office Action rejects claims 6-13 under 35 U.S.C. §103(a) as being unpatentable over *Fukuda* in view of U.S. Patent No. 4,505,992 to Dettling (*Dettling*). Applicants respectfully traverse the rejection.

Claims 6-13 variously depend from claim 5, and incorporate all the element of claim 1. As discussed, *Fukuda* fails to teach or suggest at least the above recited element of claim 5, namely, “a solid electrolyte membrane consisting of one or plural kinds of layered silicate minerals.” *Dettling* does not cure the deficiency of *Fukuda*. The Office Action cites *Dettling* for disclosing a water separator as a cooling plate. *Dettling* is also silent with respect to the above-recited element of claim 5. Accordingly, claim 5 and its dependent claims 6-13 are allowable over the combined teaching of *Fukuda* and *Dettling*. Applicants therefore respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claims 6-13.

The Office Action rejects claims 6-13 under 35 U.S.C. §103(a) as being unpatentable over *Won* in view of *Fukuda* and *Dettling*. Applicants respectfully traverse the rejection.

Claims 6-13 variously depend from claim 5, and incorporate all the element of claim 1. As discussed, *Won* and *Fukuda* fail to teach or suggest at least the above recited element of claim 5, namely, “a solid electrolyte membrane consisting of one or plural kinds of layered silicate minerals.” *Dettling* does not cure the deficiency of *Fukuda*. Accordingly, claim 5 and its dependent claims 6-13 are allowable over the combined teaching of *Won*, *Fukuda*, and *Dettling*. Applicants therefore respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claims 6-13.

The application is in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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